

WEB – applications



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Document History

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1.0	2021-01-01	GA	Initial release (Q-DAS1469/13.0.2.1)
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1.0	2022-06-03	GA	Rework (Q-DAS1685/14.0.1.1)
	2023-12-05	BA	Release version 14.0.4.1 (updated Q-Das-1685)



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Q-DAS
PLV

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1 PLV

The PLV has a ability to show different types of dashboards with different types of views on the plant.





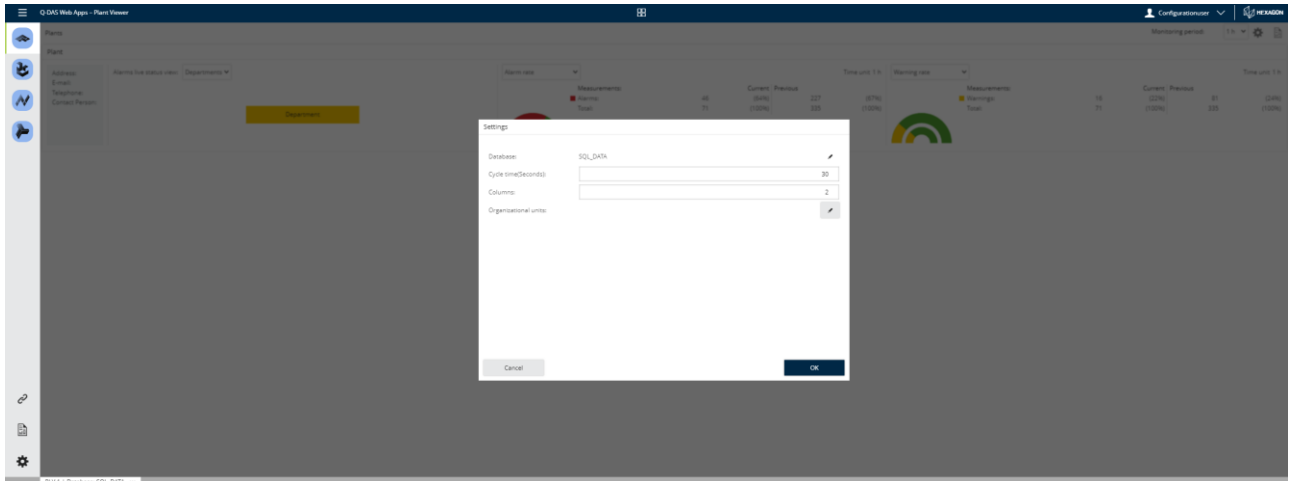
The representation of the different levels is based on the structure created in the Plant Manager (this is described in the FAQ of the Q-Launcher). The simplified structure is described for the upcoming examples:

A department in which there are two lines, each with two operations, each with two machines.

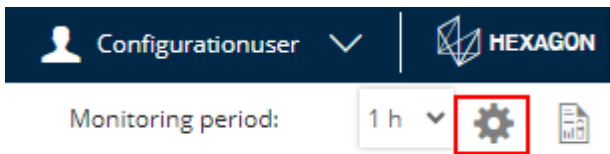
- Plant
 - Department 01
 - Workshop 01
 - Line 01
 - Operation 01
 - Machine 01
 - Machine02
 - Operation 02
 - Machine 03
 - Machine 04
 - Line 02
 - Operation 04
 - Machine 05
 - Machine06
 - Operation 05
 - Machine 07
 - Machine 08

2 Setup PLV-Web

After the first start of the PLV for a user, the wizard for the setup opens:



The configuration is saved for the user. The user can call up the wizard again at any time:



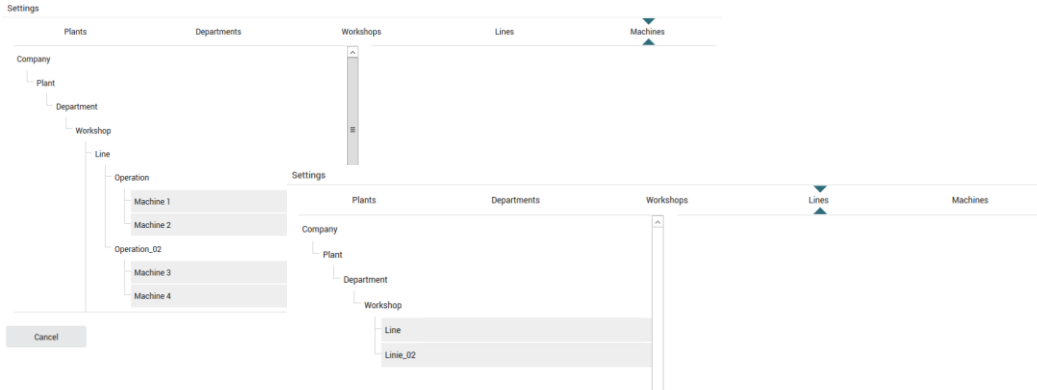
Multiple things can be set up in the wizard.

- Database connection
- Cycle time in seconds – after what period the view is refreshed
- Column – number of columns showed in the dashboard
- Organizational units – what part of organization is showed

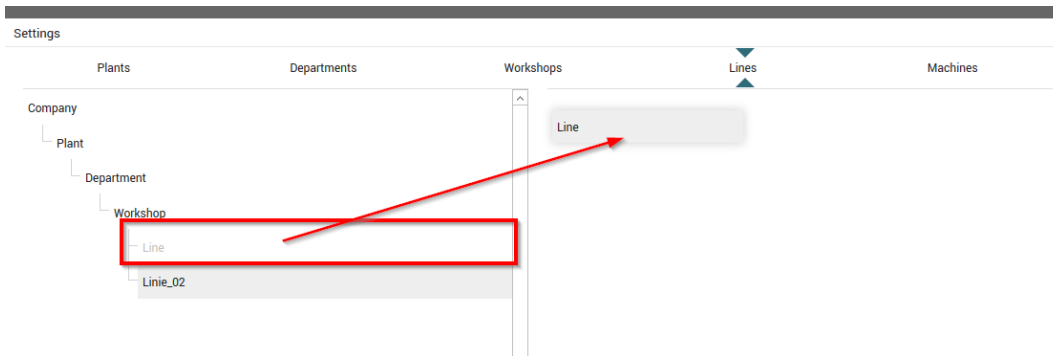


In the organizational units, the elements that were assigned in the Process Manager are selected.

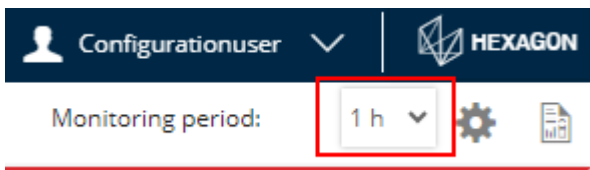
Depending on the desired level, the selectable elements are displayed in the tree structure in the left part.



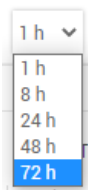
The desired element is dragged and dropped to the right part.



The monitoring period to be considered for the display of the measured values can be selected.



The following time periods are available for selection: 1 hour / 8 hours / 24 hours / 48 hours / 72 hours.



3 PLV views

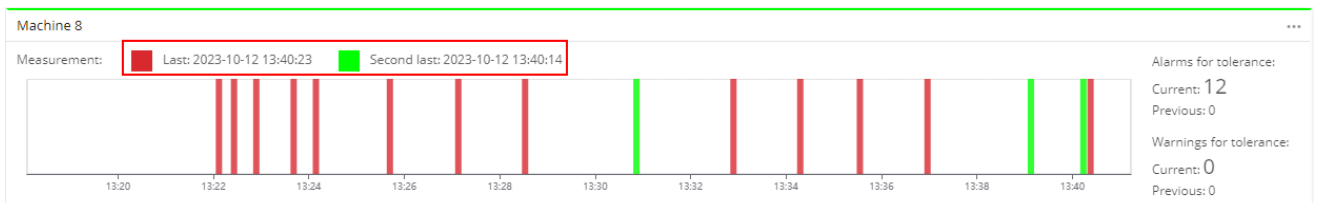
3.1 Machine view

All selected machines are displayed in the PLV:

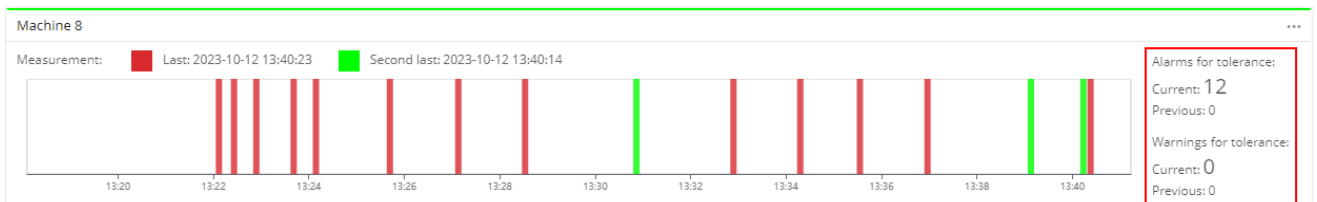


For each machine there is an information about:

The status of the last measurement and the second to last:

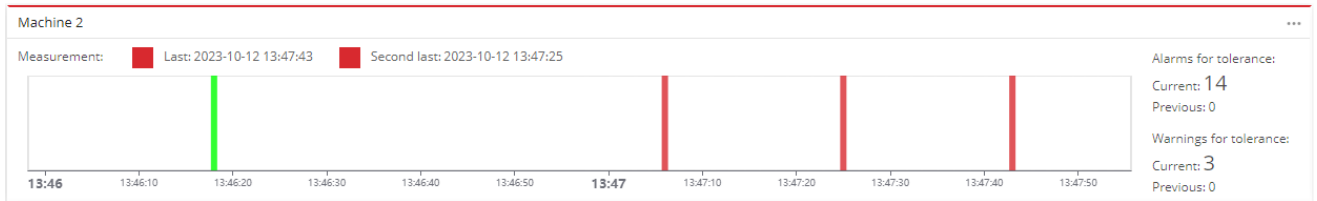


The number of tolerance alarms and warnings of the current as well as the previous time unit:



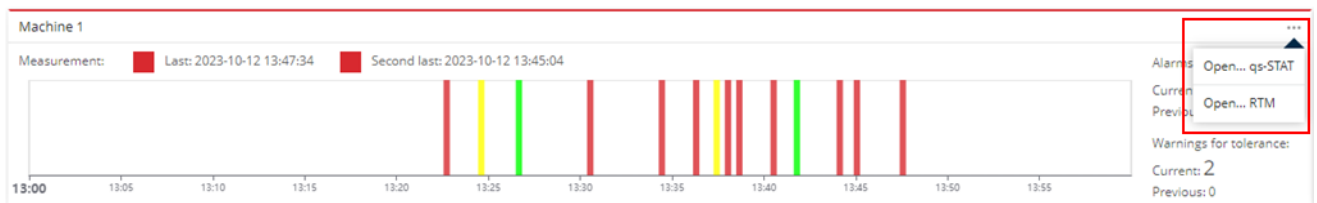


For a better view, you can click in the PLV graphic, and then zoom in with the mouse wheel:



3.1.1 Jump points

On each machine, the menu switch can be used to switch to the qs-STAT and RTM products, provided that their licenses are available:



The opening in both products takes place in the "Read Only" mode. There is a query whether only the last 100 measured values or a maximum of 5000 measured values per characteristic should be loaded.

Information

Which number of measured values would you like to load for each characteristic?

Last 100 measured values per characteristic

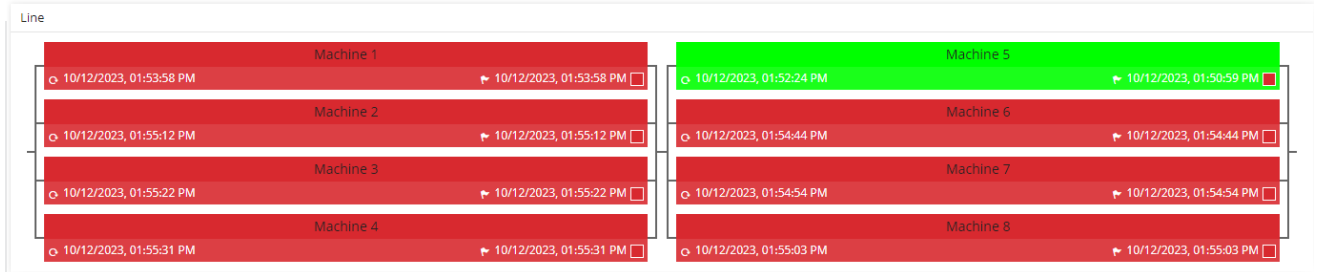
All 5000 measured values per characteristic

Cancel OK



4 Line view

In the line view all operations of the selected lines are displayed side by side



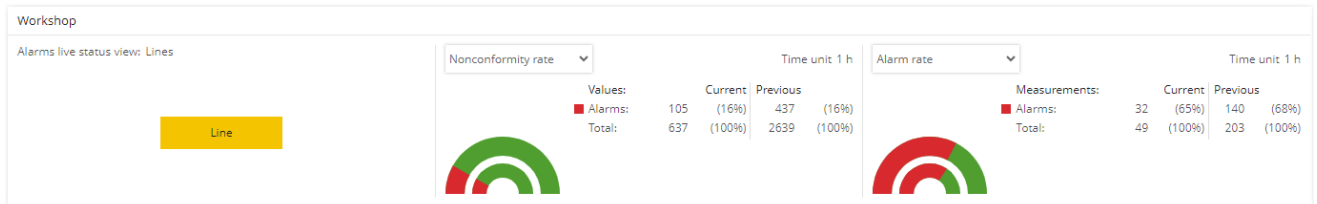
Each machine shows the status of the last measurement (green/yellow/red). The right part of each machine tile shows when the last alarm occurred.



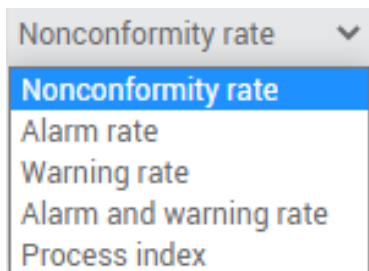
5 Plants, departments and workshops view

The view of the 3 highest levels has the same structure.

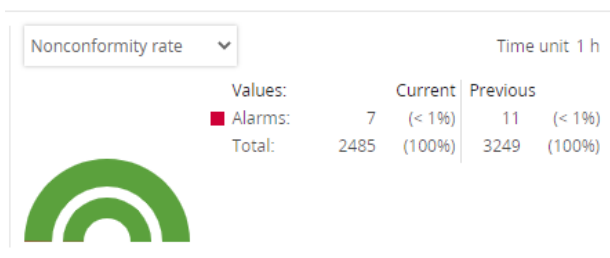
The left block shows what the last alarm status of the next levels is. Here, with the selected view of the workshops: Line



In addition, two further output options are available, in which various KPI can be shown:



5.1 Nonconformity rate



The nonconformity rate shows the number of measured values with alarm as a percentage of all measured values from the Current time unit.

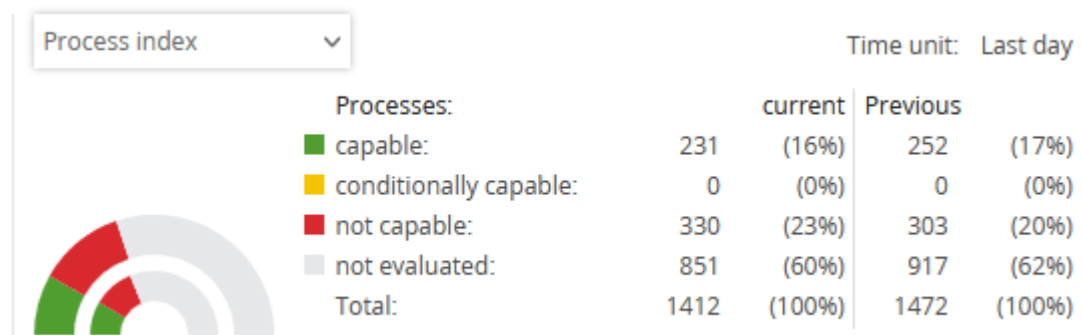


5.2 Alarm and warning rate



During data aggregation in the upload, alarms and warnings are determined for the measurements. At the selected level, the three options show the total number of measurements against the number of determined measurements with at least one alarm, or warning.

5.3 Process index



With the process index aggregation in the upload, all processes are calculated for the previous day.

In the reporting job of the upload, all data of all characteristics are loaded, which have machine data (K0010) assigned to the structure in the Process Manager.

Using the Plant Manager structure, the number of total processes are plotted against the capable / conditionally capable processes.

Processes that cannot be evaluated are disregarded.

The time unit here is always "Last day", regardless of the alarm summarization.



6 Navigation through the levels

6.1 Change from higher levels to lower levels

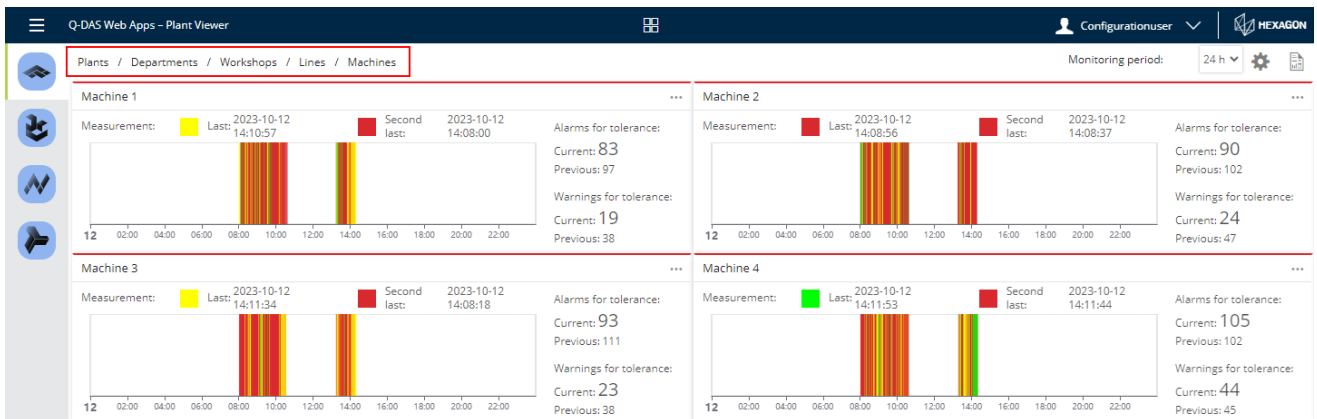
Standing on a higher level, you can switch to the level below by clicking on the header:



Regardless of the setting in the wizard for this layer, all elements subordinate to this element will then be displayed.

6.2 Change from lower levels to higher levels

A desired layer can be selected directly in the header line.

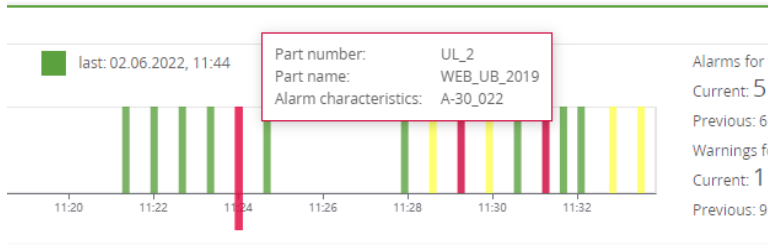


Regardless of the setting in the wizard for this level, all elements of the current string from the Process Manager are then displayed.



7 Detail view measurement

Clicking on a measured value within a machine view opens the corresponding detailed view.



Further measured value related additional information is displayed here. By clicking on "Load in qs-stat", the corresponding data set is loaded directly into qs-stat based on the specified number of measured values.

Additional information

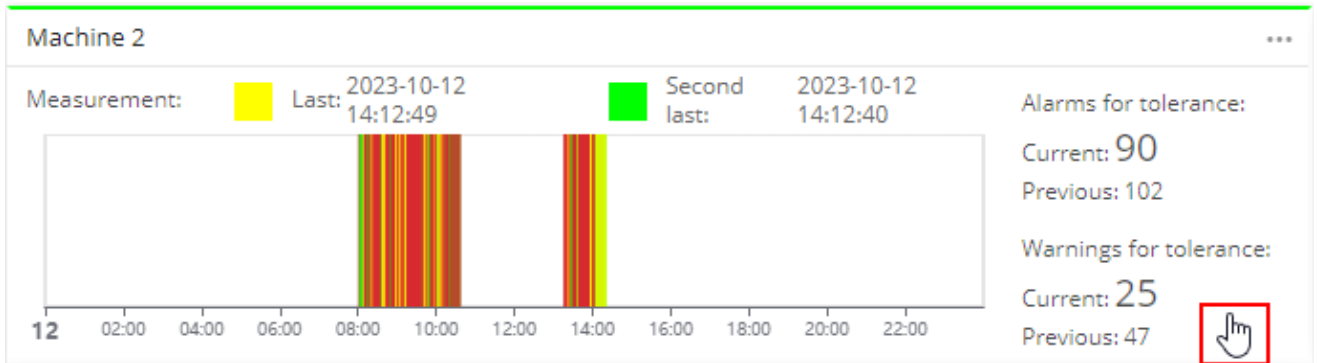
Part number:	UL_1	Alarms for tolerance	Current period	16	Warnings for tolerance	Current period	23																																
Part description:	WEB_UB_2019	Last period	30	Warnings for tolerance	Last period	47																																	
Date of last measurement:	2021-10-01 10:09:00	Alarms/Warnings for this part - sum:		<table border="1"> <thead> <tr> <th>Machine</th> <th>Alarms</th> </tr> </thead> <tbody> <tr> <td>Machine 23</td> <td>16</td> </tr> </tbody> </table>				Machine	Alarms	Machine 23	16																												
Machine	Alarms																																						
Machine 23	16																																						
Date of measurement point selected:	2021-10-01 08:05:37	<table border="1"> <thead> <tr> <th>Sequential Characteristic Number</th> <th>Value</th> <th>Nominal value</th> <th>Lower Specification Limit / Upper Specification Limit</th> </tr> </thead> <tbody> <tr> <td>Aussenleiterspannung</td> <td>2.9505</td> <td></td> <td>0.700 / 2.700</td> </tr> </tbody> </table>		Sequential Characteristic Number	Value	Nominal value	Lower Specification Limit / Upper Specification Limit	Aussenleiterspannung	2.9505		0.700 / 2.700	<table border="1"> <thead> <tr> <th>Characteristic Number</th> <th>Characteristic Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>1 Seite Mu-Drahtlaenge/Hakenmass</td></tr> <tr><td>2</td><td>1 Seite Mu-Drahtlaenge/Hakenmass</td></tr> <tr><td>3</td><td>2 Seite Mu-Drahtlaenge/Hakenmass</td></tr> <tr><td>4</td><td>1 Seite Stroz-Gesamtlaenge/Hakenmass</td></tr> <tr><td>5</td><td>2 Seite Stroz-Gesamtlaenge/Hakenmass</td></tr> <tr><td>6</td><td>Pumpspitzenmass</td></tr> <tr><td>7</td><td>Aussenleiterspannung</td></tr> <tr><td>8</td><td>Wirkungsgrad</td></tr> <tr><td>9</td><td>Spannung 1</td></tr> <tr><td>10</td><td>Plattenspannung</td></tr> <tr><td>11</td><td>Laenge</td></tr> </tbody> </table>				Characteristic Number	Characteristic Description	1	1 Seite Mu-Drahtlaenge/Hakenmass	2	1 Seite Mu-Drahtlaenge/Hakenmass	3	2 Seite Mu-Drahtlaenge/Hakenmass	4	1 Seite Stroz-Gesamtlaenge/Hakenmass	5	2 Seite Stroz-Gesamtlaenge/Hakenmass	6	Pumpspitzenmass	7	Aussenleiterspannung	8	Wirkungsgrad	9	Spannung 1	10	Plattenspannung	11	Laenge
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7	Aussenleiterspannung																																						
8	Wirkungsgrad																																						
9	Spannung 1																																						
10	Plattenspannung																																						
11	Laenge																																						

Close Load in qsSTAT



8 Detail view machine

By clicking within a machine view, further machine-related additional information is displayed.



Additional information

Alarms for tolerance

Current period 83
last 14 days 461

Warnings for tolerance

Current period 78
last 14 days 451

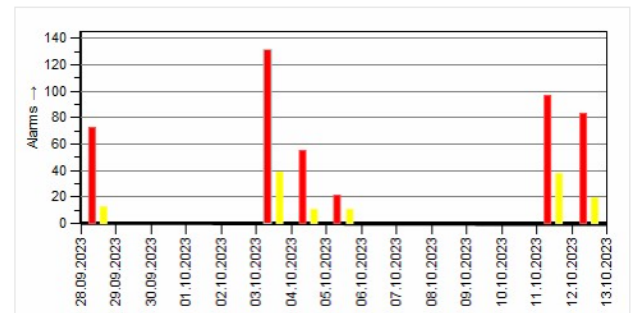
Parts with alarms and/or warnings at this machine

Part	Value	Part	Value
xBolt	83		

Parts with alarms and/or warnings at this machine - last 14 days

Part	Value	Part	Value
xBolt	461		

Overview of parts with alarms and/or warnings at this machine - by day - last 14 days:

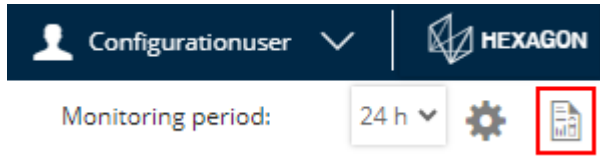


Close



9 Create, save and manage reports

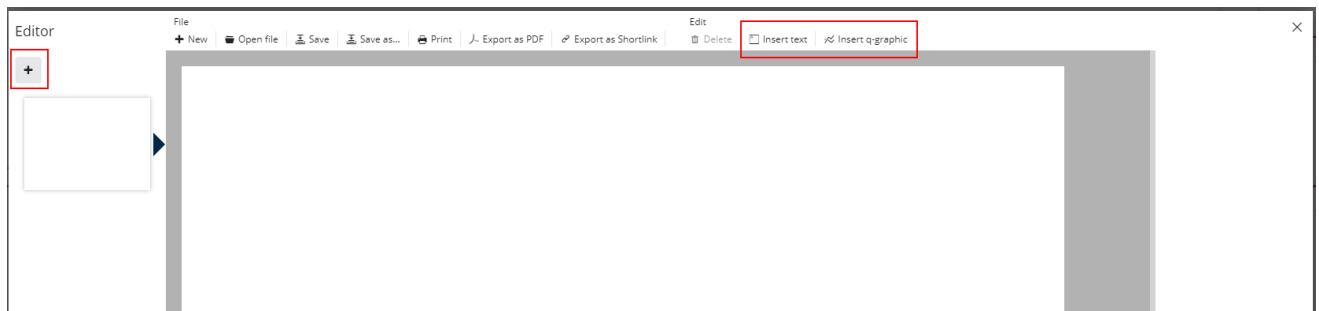
Through the Analysis & Reporting Tool (A&R Tool) it is possible to create new reports based on key information, save them, edit them and provide them to other users for use.



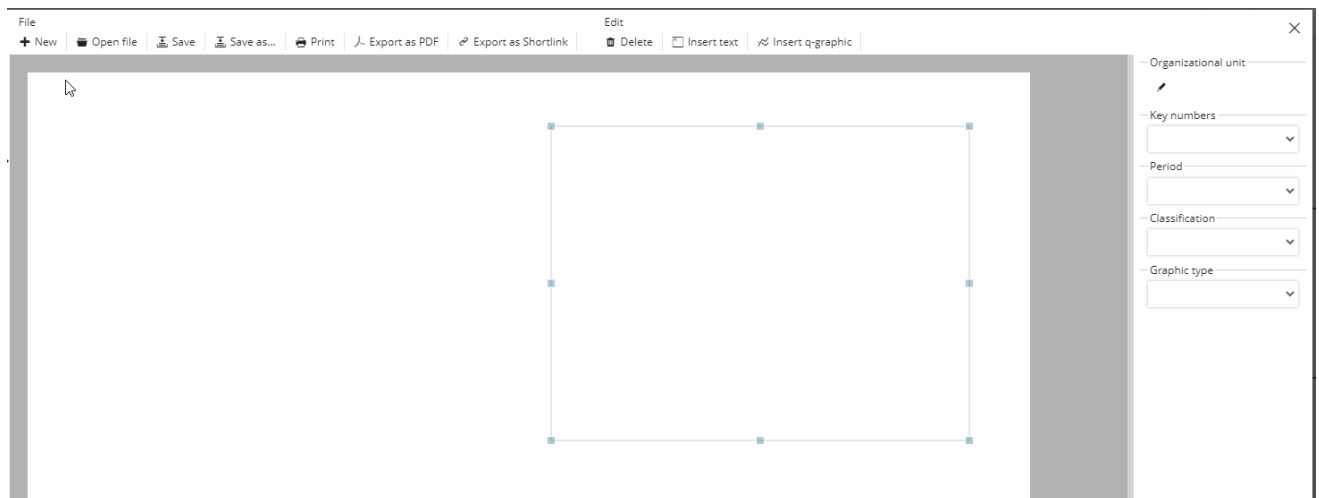
After opening the editor, the new report is automatically created.

9.1 Layout configuration

Once the editor is opened, the layout of graphics, text and number of pages can be defined.



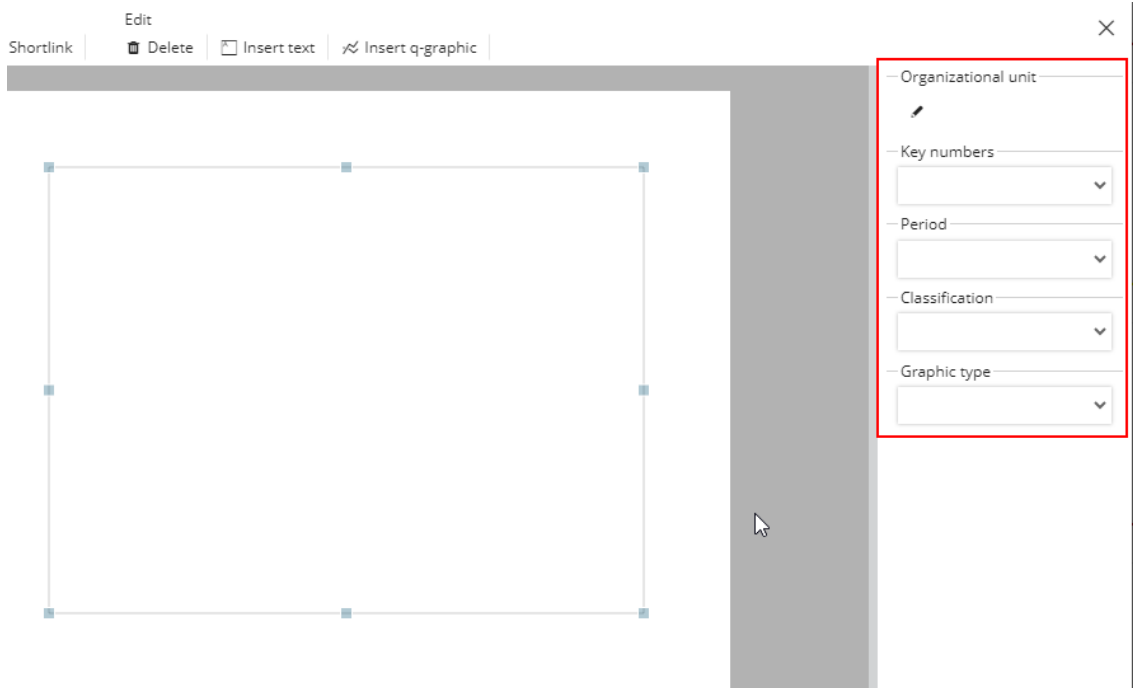
The graphic / text is added by the button “Insert q-graphic” or “Insert text”. The size and position can be adjusted.





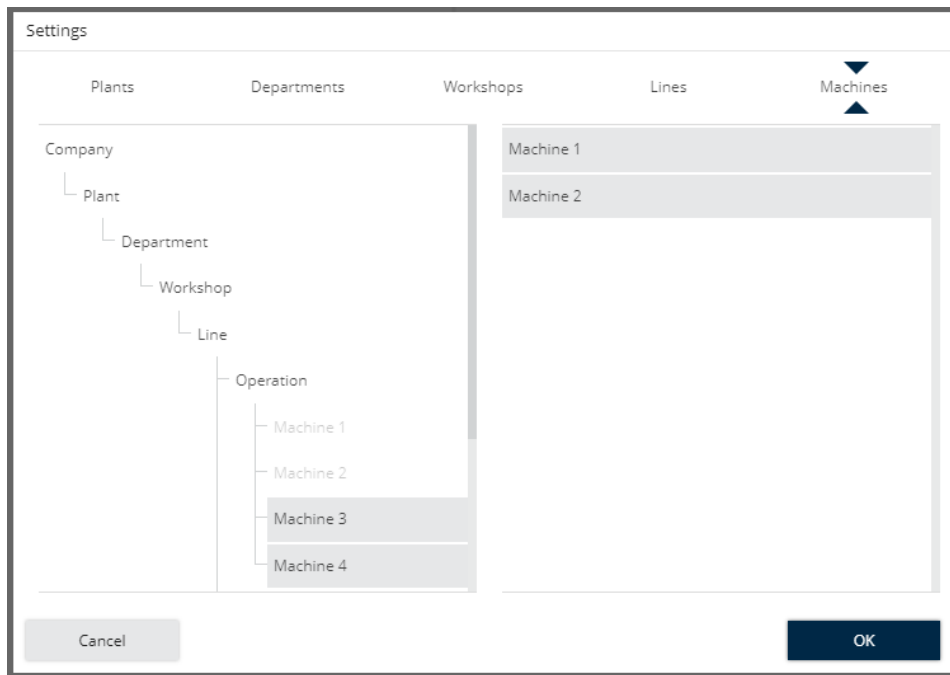
9.2 Select information to be displayed

All information to be displayed in the graphic must be defined using the right-side panel.



9.2.1 Organizational unit

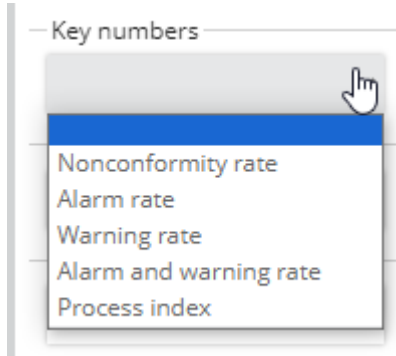
The definition of the processed data is done by selection of organization unit. Specific machines / lines / workshops / departments / plants can be chosen. Only data associated with that unit will be shown.





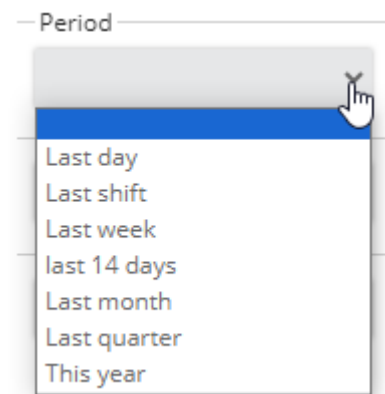
9.2.2 Key numbers

A specific information to be shown must be defined. Any information available in the PLV is also available in the report.



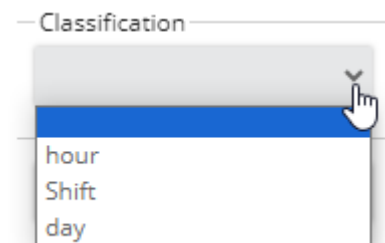
9.2.3 Period

Here, the definition of which period should be used for the output of the key numbers, is done.



9.2.4 Classification

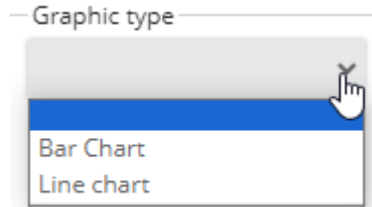
Here, the definition of what period to divide the data shown in the graphic, is done.





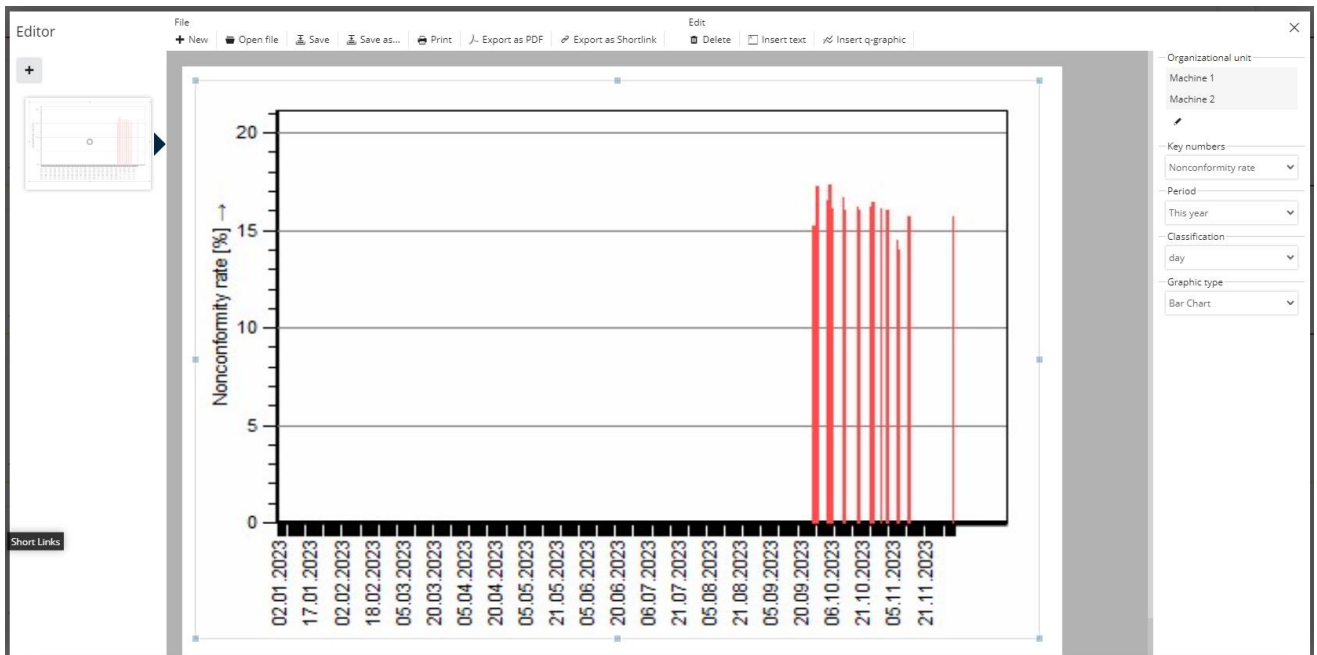
9.2.5 Graph type

The type of chart to be shown is defined here.



9.3 Preview

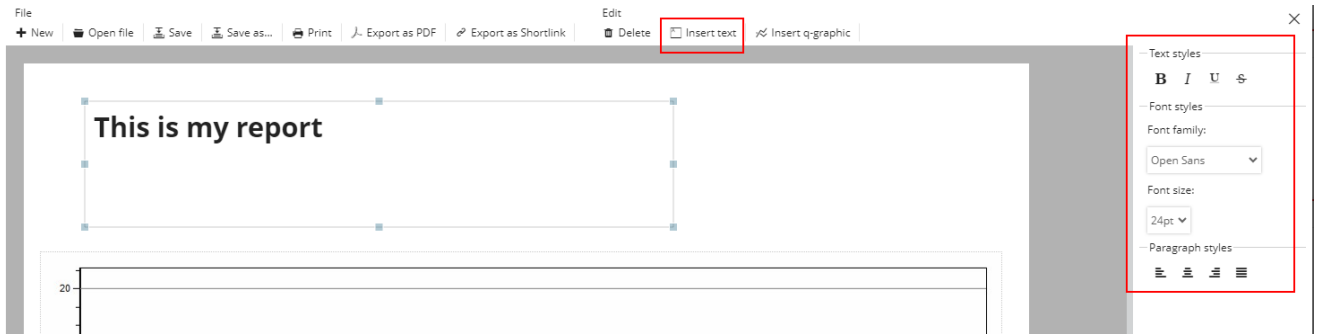
As soon as all relevant information are available, the corresponding report preview appears.





9.4 Inserting and editing text fields

Via click on "Inset text" it is possible to insert text fields, to fill them individually with text and to edit them accordingly. (Font / Font size / Font style / Alignment). Editing can be done using the right-side panel.



9.5 Deleting of the objects

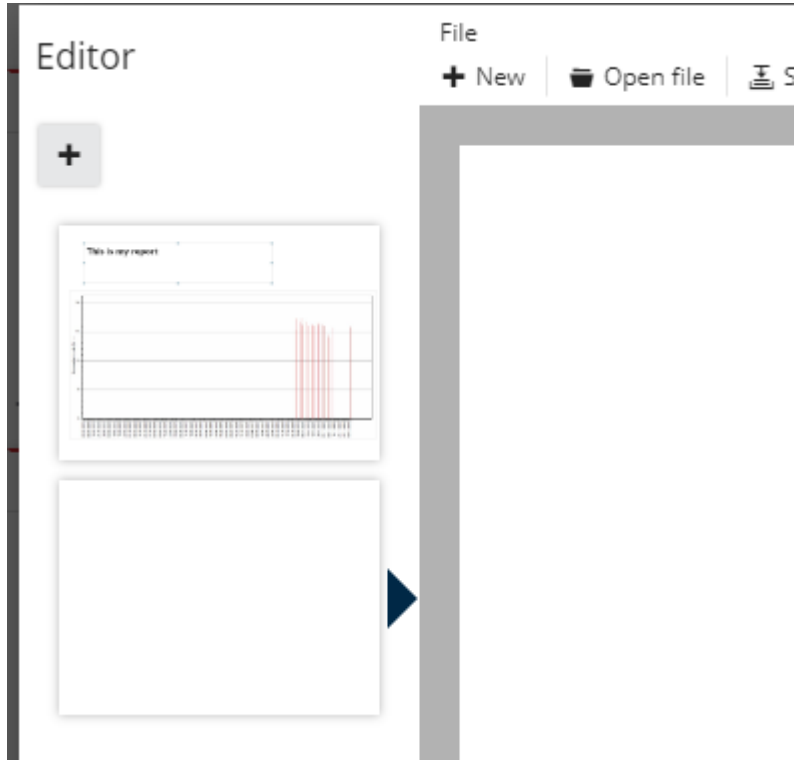
To delete a graphic or text field, use the button "Delete".





9.6 Insert new page

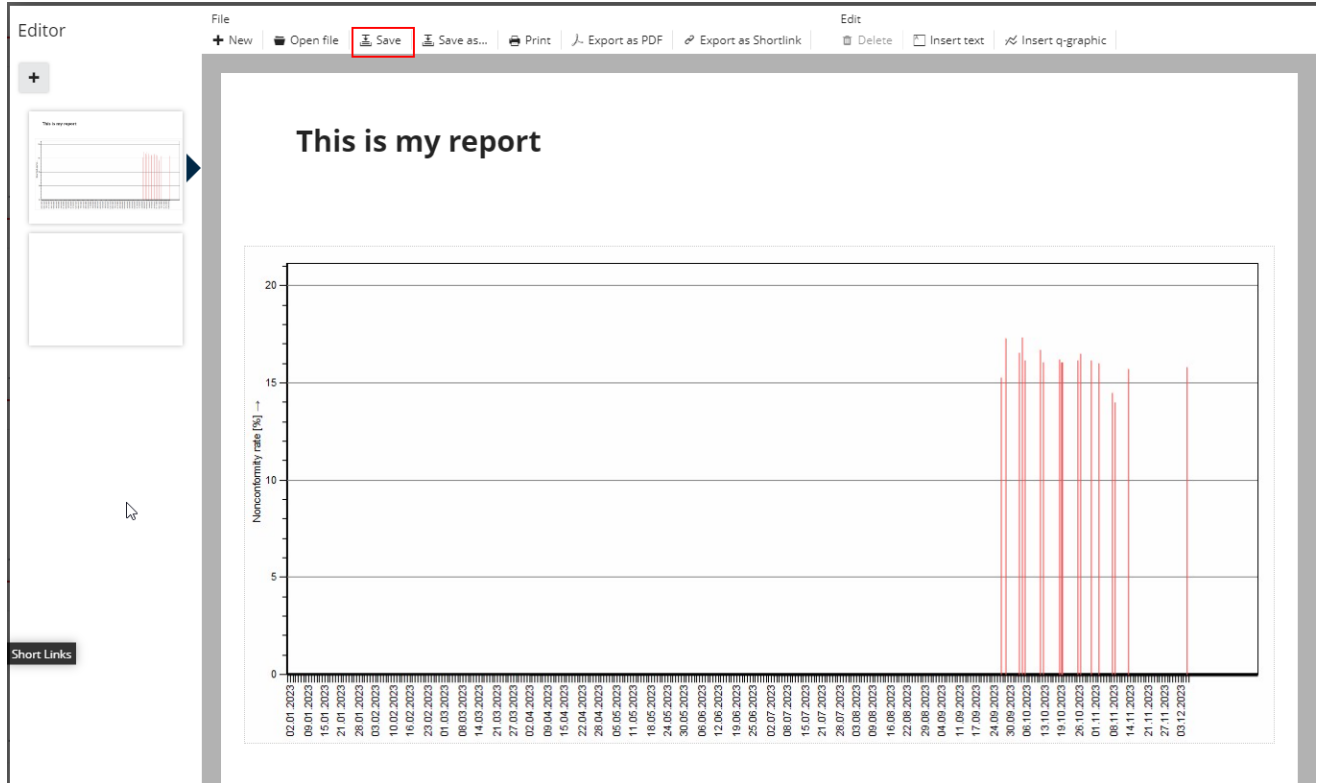
In the left-side panel a new blank page can be added to the report, using a “+” sign. An individual setting can be done to new pages.



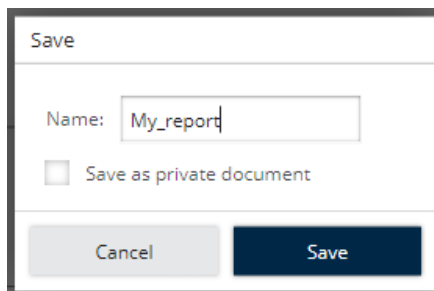


9.7 Save report

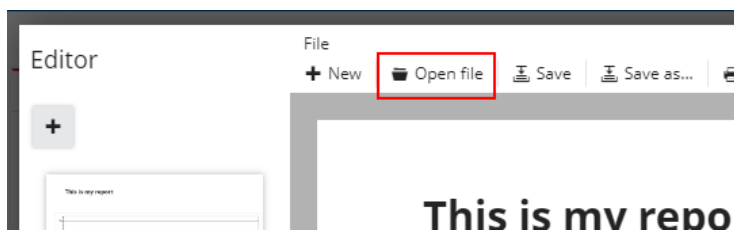
After the desired report has been created, it can be saved via "Save".



First, please assign a name to the report.



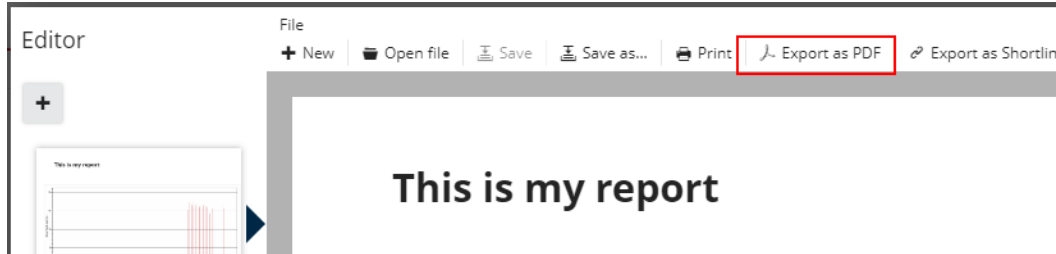
The report template will be saved and can be loaded any time via button "Open file" in the editor.



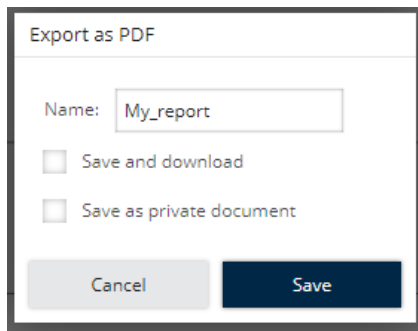


9.8 Export as PDF

To save a report to the database as PDF use “Export as PDF” button.



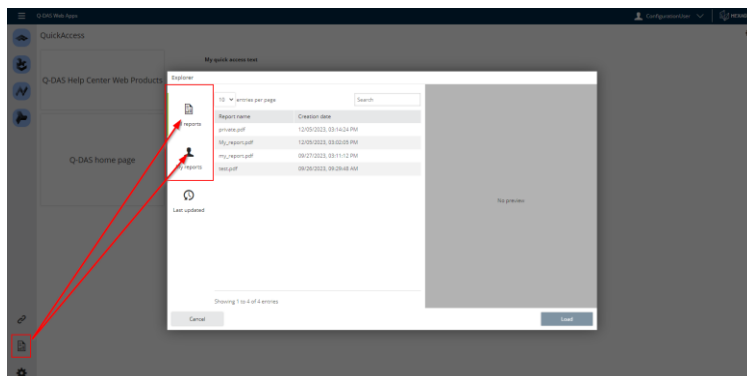
Assign a name to the report PDF.



The report is saved in the database as a PDF and is available to anyone in the Explorer of the Q-Launcher.

Additionally, two options can be used:

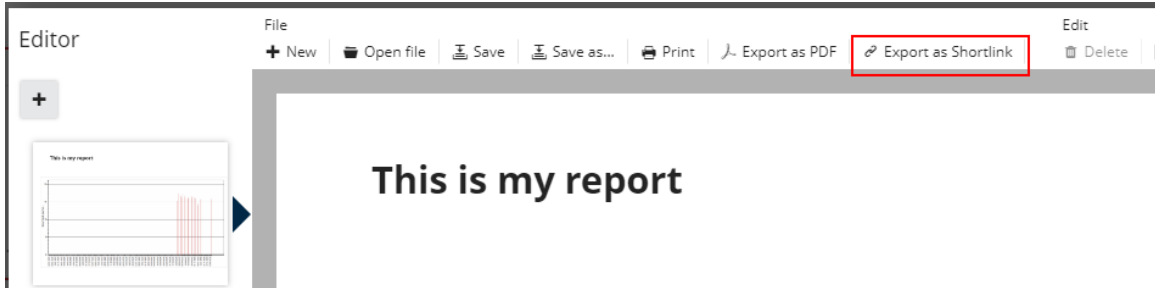
- Save and download option can be used to save the PDF to the database and download it right away after saving.
- Save as private document option can be used to store the report into “My reports” area in the Explorer of the Q-launcher. These will be available only to the user who saved the report.



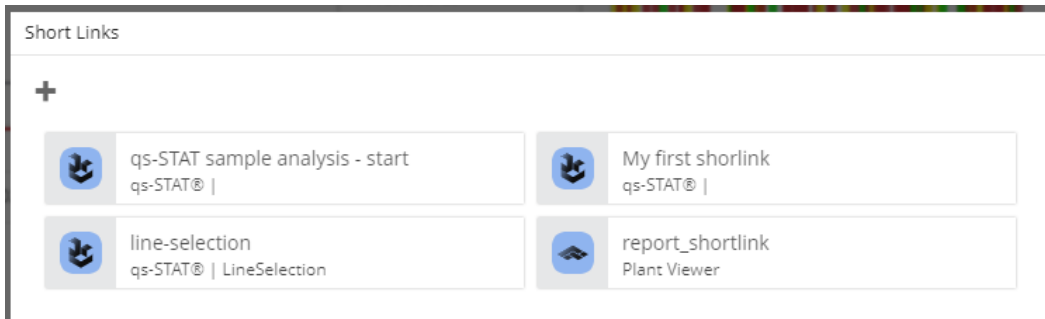
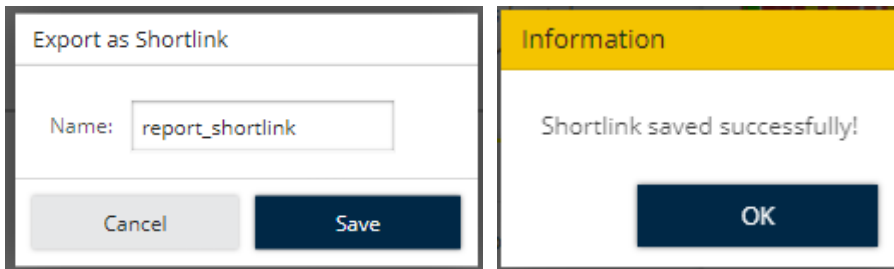


9.9 Export as shortlink

Additional saving option is available to save the report shortlink in the Q-Launcher.



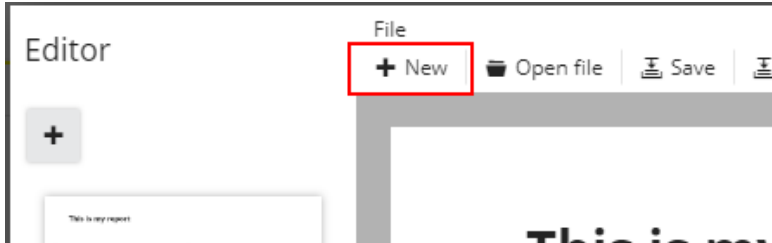
The report is then available in the Q-Launcher via the short links. The short link is explicitly only available to the user used at the time of saving.





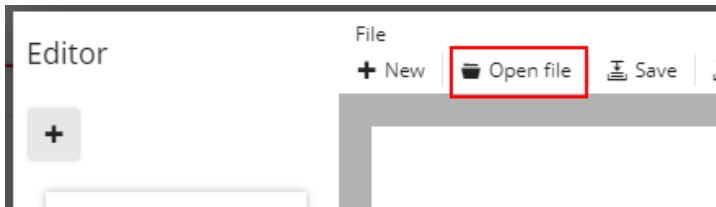
9.10 Create new report

New blank report can be created at any time using the button “New”.

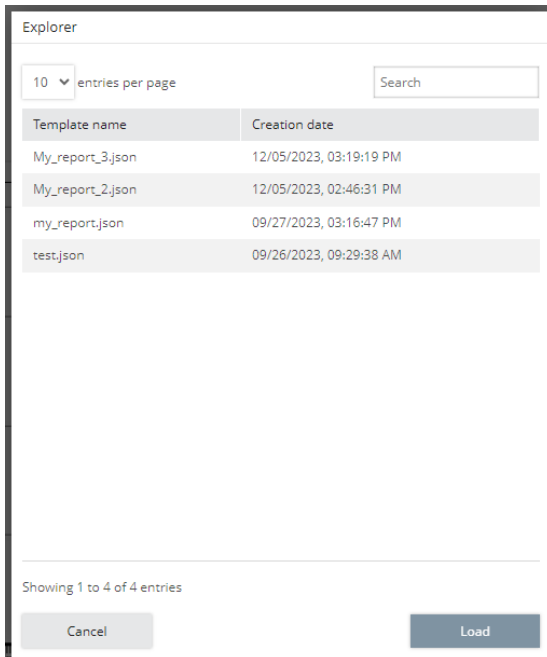


9.11 Open report template

Using the button “Open file”, an already created report template can be opened and edited.



Via the pull-down menu it is possible to specify the max. entries per page. The search field can be used to search for a report name.





9.12 Print report

The button “Print” is used for direct printing of created report.

